In the Claims:

Claims **1 to 16** (Canceled).

17. (Currently amended) An arrangement for detecting a shaft break on a rotor of a first turbine ~~(10), particularly a medium pressure turbine of a gas turbine, particularly of an aircraft engine, whereby a second turbine (11), particularly a low pressure turbine, is positioned downstream of the first turbine (10), with an~~ (10) positioned upstream, with respect to a gas flow direction, from a second turbine (11) in a gas turbine machine, said arrangement comprising a mechanical operator element (16) positioned between the rotor of the first turbine (10) and a stator of the second turbine (11) radially inwardly relative to a gas flow channel, and [[with]] a sensor element (21) guided in the stator of the second turbine (11), ~~in order to convert a shaft break, detected by the radially inwardly positioned operator element (16),~~ wherein the mechanical operator element is linearly slidably arranged between the rotor of the first turbine and the sensor element, and is located adjacent to the rotor such that the rotor will strike the operator element and linearly slide the operator element with a linear sliding motion toward the sensor element in the event of the shaft break, and wherein the sensor element is arranged and adapted to convert the linear sliding motion of the

operator element into an electrical signal and to transmit [[this]] the electrical signal to a switching element ~~which is~~ positioned radially outwardly relative to the gas flow channel on a housing of the gas turbine.

18. (Previously presented) The arrangement of claim 17, characterized in that the operator element (16) is positioned between a last rotor blade ring of the first turbine (10), as seen in the flow direction, and a first guide vane ring of the second turbine (11), as seen in the flow direction.

19. (Previously presented) The arrangement of claim 18, characterized in that the operator element (16) is positioned radially inwardly and neighboring to a rotor disk (12) of the last rotor blade ring, as seen in the flow direction, of the first turbine (10).

20. (Previously presented) The arrangement of claim 17, characterized in that the operator element (16) is guided in a radially inwardly located sealing structure (13) of the stator of the second turbine (11) in an axial direction or in the flow direction, whereby the operator element (16) is fixed in the axial direction by a shearable pin (18).

21. (Previously presented) The arrangement of claim 17, characterized in that the sensor element (21) is guided in

a radial direction in the stator of the second turbine (11), and is withdrawable out of the stator of the second turbine (11) in the radial direction.

22. (Previously presented) The arrangement of claim 21, characterized in that the sensor element (21) is guided in a first guide vane ring of the second turbine (11) as seen in the flow direction.

23. (Previously presented) The arrangement of claim 20, characterized in that the sensor element (21) cooperates, at a radially inwardly positioned end, with the operator element (16) in such a way that, in response to a shaft break, the operator element (16) is moved onto the sensor element (21) and hits the same while the pin (18) is sheared off, whereby the sensor element (21) generates thereof an electrical signal that represents a shaft break.

24. (Previously presented) The arrangement of claim 17, characterized in that the sensor element (21) is constructed as an impact sensor the structure of which is changed by an impact of the operator element (16) onto the same.

25. (Currently amended) A gas turbine, ~~particularly an aircraft engine,~~ with at least two compressors, at least one combustion chamber, and at least two turbines, and with an